**Academic Vocabulary** - Terms necessary for understanding ideas across curricular areas.

**Accuracy** - Degree of conformity of a measure to a standard value.

**Action Plan**- A series of steps and/or activities that must be successfully completed to achieve a goal.

**Analogy** - A comparison between two things for a purpose of explanation or clarification; see simile, metaphor.

**Analysis** - Identification and evaluation of data, material, and sources for quality of content, validity, credibility and relevance; student compares and contrasts sources and findings and generates summaries and explanations of source materials.

**Analyze** - To examine something in great detail in order to understand it better or discover more about it.

**Anecdotal Record** - Significant incidents or specific, observable behaviors can be recorded by teachers in anecdotal records. These records provide cumulative information about students' development in the learning objectives of the language arts as well as their physical and social growth and development. By systematically collecting and analyzing anecdotal comments, teachers can evaluate students' progress and abilities to use language and then plan appropriate instruction.

**Anecdotes** - Brief interesting or amusing life stories used to make a point.

**Apply** -To bring into action; use; employ.

**Argument** -A purpose for writing using reasons or evidence to support a claim or opinion.

**Benchmarks** - Any standard or reference by which others can be measured or judged.

**Brainstorming** - A method of shared problem solving in which all members of a group spontaneously and in an unrestrained discussion generate ideas.

**Challenge** - A call to engage in a contest or competition.

**Claims/Alternate or Opposing Claims** -

* + 1. Statement or thesis which is presented in a way so that another person could reasonably disagree; therefore claims can be “proven” only by providing opinion and/or research for support.
    2. Alternate or opposing claims are ideas that directly contradict the original claim and are also presented in a way so that another person could reasonably disagree.

**Close Read**- A process of reading and re-reading *complex text* deliberately to query, contemplate and carefully analyze and evaluate the meaning of the text in order to gain multi-layered comprehension.

**Collaboration**- The ability to work effectively with diverse teams; be helpful and make necessary compromises to accomplish a common goal.

**Communication**- The successful transmission of information through a common system of symbols, signs, behavior, speech, writing, or signals.

**Complex Question** -An open-ended question that promotes higher order thinking skills and requires students to synthesize information from multiple sources to develop answers.

**Complex Text** - A text whose complexity is determined by quantitative, qualitative and reader task components.

**Computational Thinking** - A problem solving process that includes (but is not limited to) the following characteristics-

* Formulating problems in a way the enables us to use a computer and other tools to help solve them.
* Logically organizing and analyzing data
* Representing data through abstractions such as models and simulations
* Automating solutions through algorithmic thinking
* Identifying, analyzing, and implementing possible solutions with the goal of achieving the most efficient and effective combination of steps and resources
* Generalizing and transferring this problem solving process to a wide variety of problems

**Computer Literacy** - The terminology and range of skills required to successfully use computers and other devices associated with computers.

**Constraint** - A limit to the design process. Constraints may be such things as appearance, funding, space, materials, and human capabilities.

**Convergent Thinking** - Thinking that brings together information focused on solving a problem.

**Creative Thinking or Ideas** - The ability or power used to produce original thoughts and ideas based upon reasoning and judgment.

**Criteria** - A desired specification (element or feature) of a product or system.

**Critical Thinking** - The ability to acquire information, analyze and evaluate it, and reach a conclusion or answer by using logic and reasoning skills.

**Currency** - The state of being current or up-to-date.

**Digital Citizen** - A person who using technology and the Internet effectively and responsibly.

**Digital Etiquette** - The conventional rules or personal behavior pertaining to courteous online practices.

**Divergent Thinking** -Thinking that moves away in diverging directions so as to involve a variety of aspects and which sometime leads to novel ideas and solutions.

**Domain-Specific Vocabulary** - Vocabulary specific to a particular field of study.

**Drawing Conclusions** - Using details, inferences, and insight from print or non-print text to form a judgment or decision

**Educational Technology** - Using multimedia technologies or audiovisual aids as a tool to enhance the teaching and learning process.

**Environmental Print** - Print or non-print text or graphics found in familiar settings (i.e. street signs, logos, etc.)

**Evidence** - Facts, figures, details, quotations, or other sources of data and information that provide support for claims or an analysis that can be evaluated by others; should appear in a form and be derived from a source widely accepted as appropriate to a particular disciplines, as in details or quotations from a text in the study of literature and experimental results in the study of science.

**Expository Text** -A text structure designed to convey information and/or explain

**Fallacious Reasoning** - Unsound reasoning or errors in argument or use of deception.

**Figurative Language/Meanings** -Non-literallanguage containing words and phrases that require a reader to make inferences to create a more vivid image or real experience

**Figures of Speech** - Specific non-literal expressions where the meaning is ironic, metaphorical, or rhetorical

**Global Issue** - Issues that impact the Earth as a whole.

**Higher Order Thinking Skills** - Higher order thinking skills include critical, logical, reflective, metacognitive, and creative thinking. They are activated when individuals encounter unfamiliar problems, uncertainties, questions, or dilemmas.

**Inference** - A logical guess based on evidence and prior knowledge.

**Informational Text -** Includes literary non-fiction, expository text, technical text, procedural text and functional text.

**Innovation** - An improvement of existing technological product, system, or method of doing something.

**Iterative** - Describing a procedure or process that repeatedly executes a series of operations until some condition is satisfied. An iterative procedure may be implemented by a loop in a routine.

**Lesson Seed** - Ideas that can be used to build a lesson. They are designed to generate evidence of student understanding and give teachers ideas for developing their own activities. Lesson seeds are not meant to be all-inclusive, nor are they substitutes for instruction.

**Metacognition** - Is defined as "cognition about cognition", or "knowing about knowing.” It can take many forms; it includes knowledge about when and how to use particular strategies for learning or for problem solving.

**Model** – a visual, mathematical, or three-dimensional representation in detail of an object or design, often smaller than the original. A model is often used to test ideas, make changes to a design, and to learn more about what would happen to a similar, real object.

**New** - Unfamiliar or novel to the student.

**Opportunity Cost** - The foregone benefit of the next best alternative when an economic decision is made. If the class chooses to go to the library to work on their computer skill instead of having recess, then opportunity cost of the choice is having recess.

**Optimize** - An act, process, or methodology used to make a design or system as effective or functional as possible within the giving criteria and constraints.

**Primary Source** - An original or direct source of information (i.e., diary/journal, a survey/interview, letters, photos, documents, autobiographies, and observations) characterized as Informational Text in Common Core State Standards.

**Prior Knowledge** - Information that a student knows before a lesson/ instruction / research / exploration.

**Product** – a tangible artifact produced by means of either human or mechanical work, or by biological or chemical processes.

**Proficient(ly)**- A student performance that meets the criterion established in the Standards as measured by a teacher or assessment.

**Project Manager** - a person who plans and organizes the resources necessary to complete a project.

**Prototype** – A full-scale working model used to test a design concept by making actual observations and necessary adjustments.

**Qualitative** – Of, relating to, or involving measurement of quality or kind without extensive mathematical analysis.

**Quantitative** – Relating to, or expressible in terms quantity.

**Relevant Ideas** - Any thoughts, conceptions, or notions pertinent to a learning activity.

**Researchable Question** - A clear and concise question that has a means of which to be answered through investigation. Researchable questions include questions that aid in specifying and prioritizing requirements and/or constraints of a problem or challenge.

Researchable questions include questions that help to generate a problem statement.

**Rhetoric** - The skill or art of speaking or writing effectively for a specific purpose *(i.e., narration, definition, classification, and compare/contrast).*

**Risk** – The chance or probability of loss, harm, failure, or danger.

**Secondary Source** - Information on a topic written by someone who did not participate or experience the topic first-hand.

**Self-directed** - Monitoring one's own understanding and learning needs; demonstrating initiative to advance professional skill levels; defining, prioritizing and completing tasks without direct oversight; demonstrating commitment to lifelong learning.

**Spatial Thinking**  - A cognitive skill that can be used to structure problems, find answer, and express solutions using the properties of space.

**STEM** – an acronym for science, technology, engineering, and mathematics.

**STEM Centric** – The development or modification of units, lessons, or activities to incorporate the STEM Standards of Practice and reflect the definition of STEM education.

**STEM Education** - An approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. STEM Standards of Practice guide STEM instruction by defining the combination of behaviors, integrated with STEM content, which is expected of a proficient STEM student. These behaviors include engagement in inquiry, logical reasoning, collaboration, and investigation. The goal of STEM education is to prepare students for post-secondary study and the 21st century workforce.

**STEM Proficient Students** – STEM proficient students are able to answer complex questions, investigate global issues, and develop solutions for challenges and real world problems while applying the rigor of science, technology, engineering, and mathematics content. STEM proficient students are logical thinkers who are technologically, scientifically, and mathematically literate.

**STEM Team** - A [group](http://www.businessdictionary.com/definition/group.html) of people with a full set of complementary [skills](http://www.businessdictionary.com/definition/skill.html) [required](http://www.businessdictionary.com/definition/required.html) to complete a [task](http://www.businessdictionary.com/definition/task.html), [job](http://www.businessdictionary.com/definition/job.html), or [project](http://www.businessdictionary.com/definition/project.html). Team [members](http://www.businessdictionary.com/definition/member.html)

(1) [operate](http://www.businessdictionary.com/definition/operate.html) with a [high](http://www.businessdictionary.com/definition/high.html) [degree](http://www.businessdictionary.com/definition/degree.html) of [interdependence](http://www.businessdictionary.com/definition/interdependence.html),

(2) [share](http://www.businessdictionary.com/definition/share.html) [authority](http://www.businessdictionary.com/definition/authority.html) and [responsibility](http://www.businessdictionary.com/definition/responsibility.html) for [self-management](http://www.businessdictionary.com/definition/self-management.html),

(3) are [accountable](http://www.businessdictionary.com/definition/accountable.html) for the collective [performance](http://www.businessdictionary.com/definition/performance.html), and

(4) [work](http://www.businessdictionary.com/definition/work.html) toward a [common](http://www.businessdictionary.com/definition/common.html) [goal](http://www.businessdictionary.com/definition/goal.html) and shared rewards(s).

A team becomes more than just a [collection](http://www.businessdictionary.com/definition/collection.html) of people when a strong sense of [mutual](http://www.businessdictionary.com/definition/mutual.html) [commitment](http://www.businessdictionary.com/definition/commitment.html) [creates](http://www.businessdictionary.com/definition/create.html) [synergy](http://www.businessdictionary.com/definition/synergy.html), thus generating performance greater than the [sum](http://www.businessdictionary.com/definition/sum.html) of the performance of its [individual](http://www.businessdictionary.com/definition/individual.html) members.

**Strategic/Active Listener -** Someone who effectively receives verbal and non-verbal cues and constructs meaning from them *(i.e., looking at the speaker,* *monitoring for understanding, making connections, taking turns)*

**Strategic/Active Reader** - Someone who effectively constructs meaning from text *(i.e., previews, questions, uses prior knowledge, monitors understanding, makes connections, synthesizes)*

**Subject Matter Expert** - A[professional](http://www.businessdictionary.com/definition/professional.html) who has [acquired knowledge](http://www.businessdictionary.com/definition/acquired-knowledge.html) and [skills](http://www.businessdictionary.com/definition/skill.html) through [study](http://www.businessdictionary.com/definition/study.html) and [practice](http://www.businessdictionary.com/definition/practice.html) over the years, in a particular [field](http://www.businessdictionary.com/definition/field.html) or subject, to the extent that his or her [opinion](http://www.businessdictionary.com/definition/opinion.html) may be helpful in [fact finding](http://www.businessdictionary.com/definition/fact-finding.html), [problem solving](http://www.businessdictionary.com/definition/problem-solving.html), or understanding of a situation.

**Systematic** - Performed, disposed or acting in a methodical way.

**Technical Audiences** - Audience consisting of practitioners in the field of engineering, technology, design, business, and other workforce-related disciplines.

**Technological Tool** - A device used by humans to complete a task. These tools may include rulers, protractors, computer softwares, CAD programs, etc.

**Technology Literacy** - The ability to use, manage, understand and assess technology.

**Trade-Off** – An exchange of one thing in return for another; especially relinquishment of one benefit or advantage for another regarded as more desirable.

**Transdisciplinary** - In the transdisciplinary approach to integration, teachers organize curriculum around student questions and concerns. Students develop life skills as they apply interdisciplinary and disciplinary skills in a real-life context. Two routes lead to transdisciplinary integration- project-based learning and negotiating the curriculum.

**Unit** - a series of lessons that address a common topic

**Unit Seed** – Ideas that can be used to build a unit. They are designed to generate evidence of student understanding and give teachers ideas for developing their own activities. Unit seeds are not meant to be all-inclusive, nor are they substitutes for instruction.

**Viable** - Practicable; workable

**Weigh** - Assess the importance of (a contribution) in making a decision.

**Writing Process** - The process of proficient writers: they are reflective and skilled at adapting and internalizing the stages of writing: prewriting, drafting, revising, editing, and publishing for extended as well as shorter time frame.

**References**

Business Dictionary

[http-//www.businessdictionary.com/definition/expert.html#ixzz22rrGNtGO](http://www.businessdictionary.com/definition/expert.html#ixzz22rrGNtGO)

[http-//www.businessdictionary.com/definition/team.html#ixzz22rr0e8Gf](http://www.businessdictionary.com/definition/team.html#ixzz22rr0e8Gf)

[http-//www.businessdictionary.com/definition/project-manager.html](http://www.businessdictionary.com/definition/project-manager.html)

Drake, Susan, and Rebecca Burns. *Meeting Standards through Integrated*

*Curriculum.* *Association for Supervision & Curriculum Development*, 2004, 13-17. <http://www.ascd.org/publications/books/103011/chapters/What-Is-Integrated-Curriculum%C2%A2.aspx>

“Dictionary.com” [http-//dictionary.reference.com/](http://dictionary.reference.com/)

International Society for Technology in Education (ISTE) and the Computer Science Teachers Association (CSTA). *Operational Definition of Computational Thinking for K-12 Education.* 2011 <[http-//www.iste.org/Libraries/CT\_Documents/Computational\_Thinking\_Operational\_Definition\_flyer.sflb.ashx](http://www.iste.org/Libraries/CT_Documents/Computational_Thinking_Operational_Definition_flyer.sflb.ashx)>

King, FJ, Ludwika Goodson, and Rohani Faranak. *Higher Order Thinking Skills*. Tallahassee- Florida State University’s Center for Advancement of Learning and Assessment, 1998. 1-2. Web. <[http-//www.cala.fsu.edu/files/higher\_order\_thinking\_skills.pdf](http://www.cala.fsu.edu/files/higher_order_thinking_skills.pdf)>.

National Research Council. Learning to Think Spatially- GIS as a Support System in the K-12 Curriculum. Washington, DC- The National Academies Press, 2006. 1. Print.< [http-//www.nap.edu/catalog.php?record\_id=11019](http://www.nap.edu/catalog.php?record_id=11019)>

National Governors Association Center for Best Practices and Council of Chief State

School Officers. *Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects Appendix A* . Washington D.C.- National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010. 42-43. Web. <[http-//www.corestandards.org/assets/Appendix\_A.pdf](http://www.corestandards.org/assets/Appendix_A.pdf)>

“School Improvement in Maryland”—Glossary\*

English Language Arts [http-//www.mdk12.org/instruction/curriculum/reading/glossary.shtml](http://www.mdk12.org/instruction/curriculum/reading/glossary.shtml)

School Library Media [http-//mdk12.org/instruction/curriculum/library\_media/index.html](http://mdk12.org/instruction/curriculum/library_media/index.html)

Social Studies [http-//mdk12.org/assessments/vsc/social\_studies/bygrade/glossary.shtml](http://mdk12.org/assessments/vsc/social_studies/bygrade/glossary.shtml)

Technology Education [http-//mdk12.org/instruction/curriculum/technology\_education/index.html](http://mdk12.org/instruction/curriculum/technology_education/index.html)